ABSTRACT OF THE DISCLOSURE

In a wavelet transform section, wavelet-transform coefficient signals are obtained by two-dimensional wavelet transformation, employing a low-pass filter which has a

5   characteristic that its response at a frequency greater than a spatial frequency corresponding to grid pitch is approximately zero. Based on the direction of the grid judged by a direction judging section, a suppressing section applies one-dimensional wavelet transformation to a signal containing a grid component

10   (when a vertical grid is used, signal HL1), in the grid direction. Then, a low frequency transform coefficient signal of the transform coefficient signals is made zero. The signal, made zero, and the remaining signals, are subjected to inverse one-dimensional wavelet transformation. In an inverse wavelet transform section,

15   the original image is restored with a signal having a suppressed grid component.